

$$C = \lambda \nu$$

$\rightarrow$  Frequency  $\left(\frac{1}{s}\right)$  [Hz]  
 $\rightarrow$  Wavelength (m) [ $\lambda$ ]  
 $\rightarrow$  Speed of Light  $\left(3 \times 10^8 \frac{m}{s}\right)$

$$C = \lambda \nu$$

$\rightarrow$  always know

$\nu = \frac{c}{\lambda}$
$\lambda = \frac{c}{\nu}$

$$\text{Green} = 545 \text{ nm}$$

$$\lambda = 5.45 \times 10^{-7} \text{ m}$$

$$c = \lambda \nu \quad \nu = \frac{c}{\lambda} = \frac{3. \times 10^8 \frac{\text{m}}{\text{s}}}{5.45 \times 10^{-7} \text{ m}}$$

$$3 \text{ E } 8 \div 5.45 \text{ E } (-) 7 =$$

$$\nu = 5.5 \times 10^{14} \frac{1}{\text{s}}$$

$$\lambda = 9.4 \times 10^{-7} \text{ m}$$

$$\text{IR} < 7 \times 10^{-7} \text{ m} < 4 \times 10^{-7} \text{ m} < \text{UV}$$